

**CHICAGO POWER  
ELECTRIC® SYSTEMS**

# 12 VOLT JUMP-START AND POWER SUPPLY

**Model 38391**

## SET UP AND OPERATING INSTRUCTIONS



**Note:** After purchase and before initial use of the Jump-Start, fully charge the Jump-Start battery until the DC Charging LED turns off.

After each jump start, fully recharge the battery until the DC Charging LED turns off.

Fully charge Jump-Start battery every 30 days to ensure long battery life.

Visit our website at: <http://www.harborfreight.com>



**Read this material before using this product.  
Failure to do so can result in serious injury.  
SAVE THIS MANUAL.**

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**For technical questions or replacement parts, please call 1-800-444-3353.**

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## SPECIFICATIONS

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Start Amps	400
Peak Amps	900
Battery	12 V, 17 Ah, Lead-Acid, Rechargeable Charging Current = 0.18A
Booster Cables	#4 Gauge, 17" Length
Includes: 12 Volt Cigarette Lighter Charger, AC Adapter Receptacle, Built-in Light, Booster Cable Storage, Charge/Battery Indicators	

**Note:** Charging performance of this tool (if charged by line voltage) may vary depending on variations in local line voltage. Extension cord usage may also affect charging performance.

### Save This Manual

You will need the manual for the safety warnings and precautions, assembly instructions, operating and maintenance procedures, parts list and diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep the manual and invoice in a safe and dry place for future reference.

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## SAFETY WARNINGS AND PRECAUTIONS

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**WARNING:** When using tool, basic safety precautions should always be followed to reduce the risk of personal injury and damage to equipment.

**Read all instructions before using this tool!**

1. **Keep work area clean.** Cluttered areas invite injuries.
2. **Observe work area conditions.** Do not use machines or power tools in damp or wet locations. Don't expose to rain. Keep work area well

lighted. Do not use in the presence of flammable gases or liquids.

3. **Keep children away.** Children must never be allowed in the work area. Do not let them handle this product.
4. **Store idle equipment.** When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep out of reach of children.
5. **Use the right tool for the job.** Do not attempt to force a small tool or attachment to do the work of a larger industrial tool. There are certain applications for which this tool was designed. It will do the job better and more safely at the rate for which it was intended. Do not modify this tool and do not use this tool for a purpose for which it was not intended.
6. **Dress properly.** Do not wear loose clothing or jewelry as they can be caught in moving parts. Protective, electrically non-conductive clothes and non-skid footwear are recommended when working. Wear restrictive hair covering to contain long hair.
7. **Wear ANSI-approved splash-resistant safety goggles.**
8. **Do not overreach.** Keep proper footing and balance at all times.
9. **Maintain tools with care.** Keep tools clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and, if damaged, have them repaired by an authorized technician. The handles must be kept clean, dry, and free from oil and grease at all times.

10. **Stay alert.** Watch what you are doing, use common sense. Do not operate any tool when you are tired.
11. **Check for damaged parts.** Before using any tool, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment and binding of moving parts; any broken parts or mounting fixtures; and any other condition that may affect proper operation. Any part that is damaged should be properly repaired or replaced by a qualified technician. Do not use the tool if any switch does not turn On and Off properly.
12. **Replacement parts and accessories.** When servicing, use only identical replacement parts. Use of any other parts will void the warranty. Only use accessories intended for use with this tool.
13. **Do not operate tool if under the influence of alcohol or drugs.** Read warning labels if taking prescription medicine to determine if your judgement or reflexes are impaired while taking drugs. If there is any doubt, do not operate the Jump-Start.
14. **Maintenance.** For your safety, maintenance should be performed regularly by a qualified technician.
15. If you come in contact with battery acid, immediately wash the effected area with cool, clean water. Call for medical assistance and continue flushing the effected areas until medical help arrives.
16. **The ON/Off switch (See FIGURE 1, next page) regulates power to the clamps only. Keep it in the “Off” position except when jumpstarting.**
17. Lead-acid batteries vent hydrogen gas during normal operation and charging. Hydrogen is highly flammable and explosive. Charge batteries only in a well-ventilated area.
18. Do not allow the red and black clamps to come in contact with each other or the same metal object.
19. When charging, **first** connect the **red (+)** clamp to the **positive (+)** battery terminal.
20. Connect the **negative (-)** clamp to a non-moving metal engine part for negative ground systems.
21. Only use the charger on 12 V systems on vehicles or boats.
22. Do not use as a replacement for a vehicle battery.
23. The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.
24. People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure.

## CONTROLS AND COMPONENTS

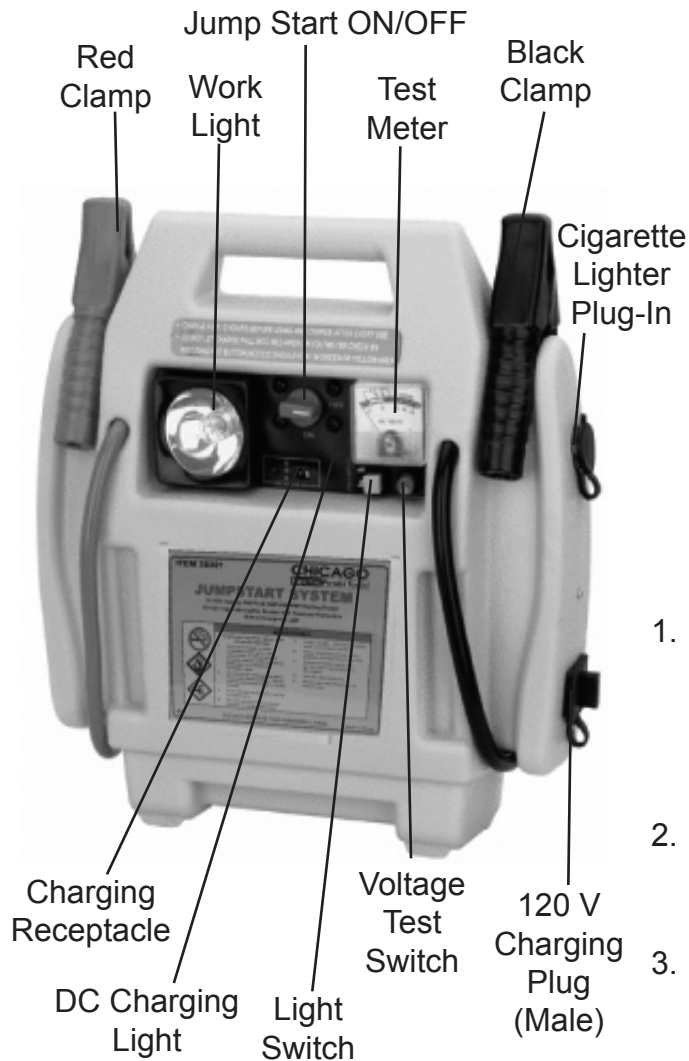


Figure 1

## CHARGING

**Note:** After purchase and before initial use, fully charge the Jump-Start battery until the DC charging LED turns off.

**WARNING!** The ON/Off switch (See **Figure 1**) regulates power to the clamps only. Keep it in the “Off” position except when jumpstarting.

## 120 V~ Charging



Figure 2

1. Plug the Power Cord (5) into a wall outlet and plug the female end of the Power Cord into the 120V male Charging Plug of the 120V~ Charging Port (see **Figure 2**, above).
2. **Before first use, fully charge the Jump-Start battery until the DC Charging LED turns off.**
3. **After each jump start, fully recharge the battery until the DC Charging LED turns off. It may take up to 48 hours to fully charge the Jump-Start battery.** Check the progress by pressing the Voltage Test Switch. The level of battery power will then display on the Test Meter.
4. **Fully recharge Jump Start battery every 30 days to ensure long battery life and reliability.**

**Note:** The charger unit comes equipped with an automatic shut off LED to prevent overcharging. Leave the unit plugged in to make sure it is charged for emergencies.

**Note:** The LED light will go on (when Switch is in the OFF position) to indicate a reverse polarity condition.

## 12 VDC Charging

**Note:** This system is equipped with a 12 VDC Cigarette Lighter Adapter so you can charge the Jump-Start from a vehicle or boat battery. This method of recharging will not charge the unit as fully as when using the 120 V~ charging method. Only use this method in an emergency situation, as this recharging method may shorten the life of the Jump-Start.

- Take out your 12 VDC Cigarette Lighter Adapter (6). The adapter has a cigarette lighter plug in one end of the cord, and a round plug on the other end. Plug the round plug into the Recharging Receptacle (See **Figure 3**). Plug the cigarette plug into the vehicle or boat cigarette lighter receptacle.



**Figure 3**

- Charge the unit for the minimal time needed (to at least 14 volts). Store the Cigarette Lighter Adapter when finished.

**Note:** Charging room temperature: 50° F - 104° F.

## OPERATION

### Using the Jump-Start as a 12 VDC power source

**Warning!!** The ON/Off switch (See **FIGURE 1**) regulates power to the clamps only. Keep it in the “Off” position except when jumpstarting.

- Insert the 12 VDC Cigarette Lighter plug from the appliance into the 12 VDC Cigarette Lighter Receptacle on the side of the unit.

**Note:** Table 2 gives approximate operating times when beginning with a fully charged system.

**TABLE 2**  
12 VDC Power Source Usage Times

Appliance	Estimated Power (watts)	Estimated Use (hours)
Fluorescent Light, Cell Phone Charger	4	50
Radio, Fan, Depth Finder	9	26
Video Recorder/ Player, Spotlight	15	14
Small Power Tool, Bilge Pump	24	8
Electric Cooler	48	3
Air Compressor, Vacuum	80	2

If you use the Jump-Start with a power inverter (not included) as a 120 V~ power source, Table 3 will give you approximate times to expect with a fully charged unit.

**TABLE 3**  
120 V~ Power Source Usage Times  
using a power inverter (not included)

Appliance	Estimated Power (watts)	Estimated Use (hours)
Spotlight, DVD Player, Sump Pump	100	1.5
Faxes/TV's Small Appliances	150	1
Computers/Printers	200	0.75
Medium Power Tool, Blender	250	0.5

**Note:** The appliance will be plugged into the power inverter (not included), and the 12 VDC Cigarette Lighter plug from the inverter will plug into the 12 VDC Cigarette Lighter Receptacle on the side of the unit.

### Jump Starting a Vehicle

1. **NOTE:** Press the Light Switch to activate Work Light in case it is needed.
2. Attach the **Red (+)** Clamp (1) to the **red (+) positive** battery terminal.
3. Attach the **Black (-)** Clamp (2) to a non-moving metal engine part on negative ground systems, **NOT to the negative (-) battery terminal.**
4. Turn the On/Off switch to "On".
5. Turn the ignition to "On"- Accessory (not start) and wait a couple of minutes.
6. Attempt to start the engine for no more than 5-6 seconds.
7. If the vehicle does not start, wait at least three minutes until trying again. Repeated attempts may flood the engine or wear out the engine starter. If unable to start, replace the battery.

**WARNING! Do not let the black and red clamps touch each other or a common metal conductor.**

8. When the engine is running, switch off the Jump-Start.
9. Disconnect the **Black (-)** Clamp and return it to its position on the Jump-Start. Then, disconnect the **Red (+)** Clamp and return it to its position on the Jump-Start.
10. After each jump start, fully recharge the Jump-Start battery until the DC Charging LED turns off.

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## **Recharging Using 12 VDC Supply**

1. Insert the Cigarette Lighter Recharger Plug into the Front Panel port labeled **Recharge**.
2. Insert the other end of the Cigarette Lighter Recharger Cord into the 12 VAC Cigarette lighter receptacle on your vehicle or boat.
3. Allow the Jump Start System to recharge for 10 hours or until Charging LED turns off. An automatic cut off will help prevent overcharging the battery.

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## **MAINTENANCE**

**Note:** The main power switch should be off during any maintenance. Do not perform maintenance while charging.

1. Keep the unit clean and make sure the clamps are free of dirt, debris, or grease.
2. For a longer working life, protect Jump-Start from sunlight and moisture.
3. Lead-Acid batteries must be recycled or disposed of properly. Do not short terminals. Do not incinerate. Risk of electric shock; use only in dry location. Only use with battery packs distributed by Harbor Freight Tools; others may burst, causing personal injury and/or property damage. For additional information on battery recycling call 1-800-822-8837.

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## **Battery Replacement**

1. Remove the eight screws around the back panel and lift off the cover plate. Lift out the battery.

**Note:** Notice how the red and black cables connect to the old battery and make sure to keep them in place, connecting them to the new battery.

2. Detach the recharging wires and jumper cables from the battery terminals.
3. Position the replacement battery with the label facing out, and make sure the **red (+)** recharging wire and Booster Cable is attached to the **positive (+)** battery terminal. Connect both of the recharging wires and Booster Cables.
4. Carefully slide the battery into the compartment without damaging the circuit board.
5. Replace the back panel and the screws.

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## **Emergency Light Bulb Replacement**

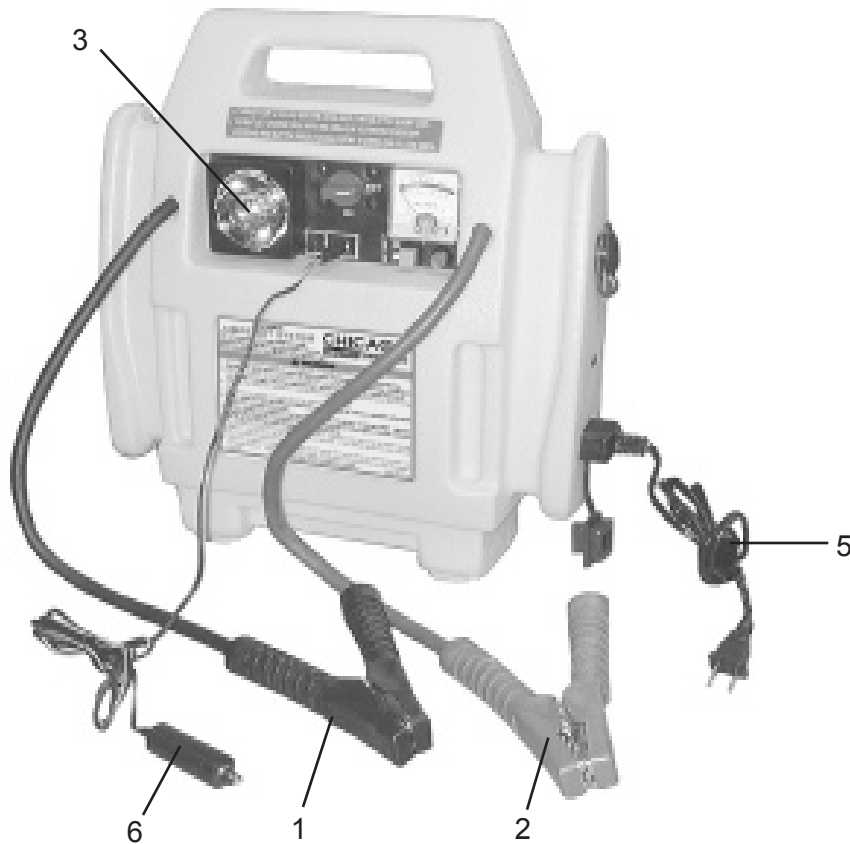
1. Gently squeeze the light lens/bezel together and remove them.
2. Unscrew the bulb and replace it.
3. Snap the lens/bezel into place.

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## PARTS LIST AND ASSEMBLY DRAWING

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Part	Description
1	Red Clamp
2	Black Clamp
3	Light Bulb
4	Battery (Internal, not shown)
5	Power Cord
6	Cigarette Lighter Recharger



### PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER NOR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

**NOTE:** Some parts are listed and shown for illustration purposes only and are not available individually as replacement parts.



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## LIMITED 90 DAY WARRANTY

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Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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